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EXAMINER
NAJJAR, SALEH

ART UNIT	PAPER NUMBER
2157	13

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/328,657	BREITBART ET AL.
	Examiner	Art Unit
	Saleh Najjar	2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *17 March 2003* .

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-36* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-36* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *12* .	6) ☐ Other: .

1.   This action is responsive to the communication filed on March 17, 2003. Claims
1-36 are pending. Claims 1-36 represent method and apparatus for managing address
translations for replicated files in a network .

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
form the basis for the rejections under this section made in this Office action:
    A person shall be entitled to a patent unless --
    (e) the invention was described in a patent granted on an application for patent by another filed in the
    United States before the invention thereof by the applicant for patent, or on an international application
    by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
    title before the invention thereof by the applicant for patent.

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:
    (a) A patent may not be obtained though the invention is not identically disclosed
    or described as set forth in section 102 of this title, if the differences between the
    subject matter sought to be patented and the prior art are such that the subject
    matter as a whole would have been obvious at the time the invention was made
    to a person having ordinary skill in the art to which said subject matter pertains.
    Patentability shall not be negatived by the manner in which the invention was
    made.

        This application currently names joint inventors. In considering patentability of
the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of
the various claims was commonly owned at the time any inventions covered therein
were made absent any evidence to the contrary. Applicant is advised of the obligation
under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was
not commonly owned at the time a later invention was made in order for the examiner to
consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)
prior art under 35 U.S.C. 103(a).

4.   Claims 1-9, 14-15, and 33-36 are rejected under 35 U.S.C. 102(e) as being
anticipated by Domenikos et al., U.S. Patent No. 6,115,741 (referred to hereafter as
Dom).
        Dom teaches the invention as claimed including a system and method for
executing application programs from a memory device linked to a server (see abstract).
        As to claim 1, Dom teaches a method of communication between a client
computer and a server computer connected to the client computer by a

communications network, the method comprising the steps of:

(a) receiving, at the client, a user's selection of a hyperlink that is a logical point of access to a file, the logical point of access being associated with a logical reference in a parent file, the logical reference uniquely identifying the file independently of an electronic address at which the file is located (See fig. 1; col. 7-9, Dom discloses that a client is presented with a web page have links upon the user selection of a parent file or page);

(b) identifying an electronic address corresponding to the logical reference; and

(c) receiving, at the client, the file identified by the logical reference (see figs. 1-7; col. 9, Dom discloses that the client selection of a link is translated to a request for a particular file at the server).

As to claim 2, Dom teaches method of claim 1, wherein the identifying step is performed at the client by reference to a list of physical references at the client, the list of physical references identifying a plurality of electronic addresses corresponding to the logical reference (see figs. 1-7; col. 14, Dom discloses a remote file pointers used by the client to access files).

As to claims 3-4, Dom teaches the method of claim 2, wherein the identifying step is performed at the client by a program for selecting a server and the method further comprises the step of:

(d) receiving at the client the program for selecting a server, further comprising the step of: (e) receiving at the client a parent file containing the logical point of access; wherein step (d) is performed during step (e); and step (e) is performed before step (a).(see col. 17-18, Dom discloses a launcher program sent to the client for selecting the file transfer sites).

As to claims 5-6, Dom teaches the method of claim 2, wherein the list of physical references is appended to the parent file and wherein the server modifies the parent file to include the list of physical references before transmitting the parent file to the client (See col. 17-18).

As to claims 7-9, Dom teaches method of claim 6, wherein the server transmits the program for selecting a server to the client, wherein the server modifies the

parent file to include the server selection program, wherein the server computer modifies the parent file to include a reference to the server selection program before transmitting the parent file to the client (see col. 9-10, col. 17-18).

Claims 14-15, and 33-36 do not teach or define any new limitation above claims 1-9, and therefore are rejected for similar reasons.

5.   Claims 10, 16-19, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Guenthner et al., U.S. Patent No. 6,134,588 (referred to hereafter as Guen).

Guen teaches the invention as claimed including a high availability web browser access to servers (see abstract).

As to claim 10, Guen teaches method of communication between a client computer and a server computer connected to the client computer by a communications network, the method comprising the steps of:

(a) receiving, at the server, a request for transfer to a client of a parent file containing a logical reference, the request being in the form of a physical reference;

(b) modifying the file, at the server, by inserting therein a list of physical references corresponding to each logical reference; and (c) transmitting, from the server to the client, the modified file (see figs. 1-8; col. 6, Guen discloses that a host name address list file HAL is transmitted to the client in response to a selection of a link).

As to claim 16, Guen teaches the client computer comprising:

a memory for storing programs and data; a processor for executing programs; a parent file, stored in the memory, containing a logical reference uniquely identifying a file independently of an electronic address at which the file is located (see figs. 1-8; col. 4-8);

a list of physical references, stored in the memory, listing at least one electronic address for each logical reference; and a program, stored in the memory, for selecting a server responsive to a request for the file identified by the logical reference, the program requesting the file using an electronic address from the list indicating the file's location on the selected server, and to repeatedly select an alternate server and submit an

alternate request if the file is irretrievable from the selected server until the file is transmitted to the client or until the file has been requested from all servers identified in the list (see col. 4-9).

As to claim 17, Guen teaches the client of claim 16, wherein the server selection program selects a server which is most likely to provide a fastest response time (see col. 4-8, Guen discloses a launcher program used for selecting addresses).

As to claim 18, Guen teaches the client of claim 17,, wherein the server selection program selects an alternate server which is most likely to provide a next-fastest response time, if the first selected server fails to begin transmission of the requested file to the client within a predetermined amount of time (see col. 4-9, Guen discloses that the Hal list of addresses are reconstructed at the client).

As to claim 19, Guen teaches the client of claim 18, wherein the program for selecting a server is comprises an instructional applet written in the Java programming language (see col. 6, Guen discloses that a plugin is used for server selection).

Claim 22 does not teach or define any new limitation above claims 10, 16-19 and therefore are rejected for similar reasons.

6.   Claims 11-13, 20-21, and 23-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guen.

Guen teaches the invention substantially as claimed including a high availability web browser access to servers (see abstract).

As to claims 11-13, Guen teaches the method of claim 10.

Guen fails to teach the limitation wherein the method further comprises the step of: (d) modifying the file, at the server, by inserting therein a program for selecting a server. Guen does teach that applications are selected from links provided on a web page and that a plugin is utilized by the client station to select the server from the HAL list (see col. 6).

However, "Official Notice" is taken that the concept and advantages of embedding a program reference to a web page is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guen by embedding a program reference link to a web page selected by a client for downloading a plugin to automate a process on the client. One would be motivated to do so to provide simple access to plugin programs or helper applications.

As to claim 20, Guen teaches the client of claim 19.

Guen fails to teach the limitation wherein the applet employs object signing technology to open connections to various servers and to save its state on a storage device on the client. Guen doe teach that authorization to a user group at the beginning of a session request (see col. 3-4).

However, "Official Notice" is taken that the concept and advantages of using an applet that employs object signing technology to open connections to various servers and to save its state on a storage device on the client is old and well known in the data processing art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guen by employing a embedded program applet to automatically authorize the client. One would be motivated to do so to automate the authorization routine at the client.

As to claim 21, Guen teaches the client of claim 20, wherein the server selection program determines a server's expected response time on the basis of the server's times for response to past requests from the server selection program (see col. 4-8).

As to claim 23, Guen teaches the server of claim 22, wherein the server stores in the memory a Host address list (HAL) associating logical references to files with electronic addresses of the files stored on a plurality of servers, the list of electronic addresses being excerpted from the address directory (see col. 4-8).

Guen fails to teach the claimed limitation of a replication directory. Guen does teach that a memory at the server does store host address list capable of delivering a particular file (see col. 4-8).

"Official Notice" is taken that the concept and advantages of using a replication directory is old and well known in the art. It would have been obvious to one of ordinary

skill in the art at the time of the invention to modify Guen by specifying the HAL lists as replication directories since the same functionality is achieved.

As to claims 24-25, Guen teaches the server of claim 23.

Guen fails to teach the limitation , further comprising a second program for modifying the parent file by inserting a program for selecting a server upon a request for a file identified by a logical reference before transmitting the parent file. Guen does teach that applications are selected from links provided on a web page and that a plugin is utilized by the client station to select the server from the HAL list (see col. 6).

However, "Official Notice" is taken that the concept and advantages of embedding a program reference to a web page is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guen by embedding a program reference link to a web page selected by a client for downloading a plugin to automate a process on the client. One would be motivated to do so to provide simple access to plugin programs or helper applications.

As to claim 26, Guen teaches the server of claim 25, further comprising a third program for identifying a status of each server identified in each electronic address in the replication directory (see col. 4-8, Guen teaches that the client traverses the list of addresses to asses the response of the servers).

Guen fails to teach the limitation of identifying the servers as a parent or child of the server in a genealogy tree representing servers storing the file.

However, "Official Notice" is taken that the concept and advantages of identifying or classifying servers as using a parent or child of the server in a genealogy tree representing servers storing the file is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guen by identifying or classifying servers as using a parent or child of the server in a genealogy tree representing servers storing the file to accurately depict server status information.

As to claims 27-29, Guen teaches the server of claim 26, further comprising a fourth program for tracking the server's load (see col. 4-8.

Guen fails to teach the limitation of autonomously determine when, on the basis of the server's load, to delete one of the server's files, to delete the file, to update the server's replication directory to remove the electronic address of the file on the server, and to propagate an update request to all parent and children of the server in the replication directory requesting the parent and children to update their respective replication directories.

However, "Official Notice" is taken that the concept and advantages of "autonomously determine when, on the basis of the server's load, to delete one of the server's files, to delete the file, to update the server's replication directory to remove the electronic address of the file on the server, and to propagate an update request to all parent and children of the server in the replication directory requesting the parent and children to update their respective replication directories" is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guen by autonomously determine when, on the basis of the server's load, to delete one of the server's files, to delete the file, to update the server's replication directory to remove the electronic address of the file on the server, and to propagate an update request to all parent and children of the server in the replication directory requesting the parent and children to update their respective replication directories. One would be motivated to do so to implement an accurate load balancing model.

As to claim 30, Guen teaches the server of claim 29.

Guen fails to teach the limitation further comprising a seventh program for batching several. updates into a single update request.

However, "Official Notice" is taken that the concept and advantages of batching several updates into a single update request is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guen so that several update requests are patched into a single request. One would be motivated to do so to reduce network traffic.

As to claim 31, Guen teaches the server of claim 30, further comprising a eighth program for transmitting to another server, along with an update request, a local time stamp indicating the time at which an update to the server's address directory was made, the other server receiving and retaining a record of the time stamp and updating the address directory (see col. 4-8, Guen discloses that the HAL update messages include time stamps.

Guen fails to teach the claimed limitation of a replication directory. Guen does teach that a memory at the server does store host address list capable of delivering a particular file (see col. 4-8).

"Official Notice" is taken that the concept and advantages of using a replication directory is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guen by specifying the HAL lists as replication directories since the same functionality is achieved.

As to claim 32, Guen teaches the server of claim 31, further comprising a ninth program for retaining -the time stamp for a limited period of time, the other server updating the address directory if a time stamp is received along with an update request and no time stamp is then retained by the other server (see col. 4-8).

7.   Applicant's arguments filed March 17, 2003 have been fully considered but they are not persuasive.

In the remarks, the applicant argues in substance that; A) Domenikos provides no disclosure whatsoever of a logical reference uniquely identifying a file independently of an electronic address at which the file is located, that Domenikos discloses selection of links associated with conventional electronic addresses which are physical in nature, that a logical reference is not analogous to a URL or other electronic address used by Domenikos; B) Domenikos indicates that the file pointers are not logical references, and that the file pointer is a handle to a physical location; C) there is no disclosure

whatsoever of a logical reference uniquely identifying a file independently of an electronic address at which the file is located; D) concerning claim 10, there is no disclosure of modifying a file containing a logical reference at a server to insert a list of physical references corresponding to the logical reference so that a single file includes both a logical reference and a corresponding physical references.

In response to A) and C); on page 3 of the applicant's response, a logical reference is defined by the applicant as unlike a physical reference in that it does not in and of itself provide sufficient information for identifying, locating, retrieving and / or transmitting a desired file, rather it is a place holder that is matched with a conventional electronic address of a file (physical address), the logical reference is associated with a hyperlink selectable by a user. The applicant has not established a difference between the applicant's logical reference and the disclosure of Domenikos that a HTML file is retrieved containing links (graphical links/graphical icons) that refer to the physical address of a file (see col. 9-14). Similarly in Domenikos the logical reference (graphical icon) refers to a physical address, that is one cannot discern from looking at a graphical icon the physical address of the file represented by the graphical icon.

In response to B); Domenikos discloses that the file pointers can be represented by hyperlinks (logical links) or graphical icons that are used by the client by clicking on a corresponding graphical icon representing a file to refer to a physical address (see col. 14).

In response to D); there is no indication in claim 10 that a logical reference is included with physical references in the same file in the claim.

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CAR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CAR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Ario Etienne*, can be reached on (703) 308-7562. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600. The fax number for the After-Final correspondence/amendment is (703) 746-7238. The fax number for official correspondence/amendment is (703) 746-7239. The fax number for Non-official draft correspondence/amendment is (703) 746-7240.

Saleh Najjar
Primary Examiner / Art Unit 2157